

WHAT IS CLAIMED IS:

- 1 1. A method of creating a family tree, comprising:
 - 2 at a host computing system, receiving genealogy data from at least one
 - 3 primary source;
 - 4 creating one or more node records and one or more link records using the
 - 5 genealogy data, wherein individual node records include at least name data and each
 - 6 individual link record includes relationship data that represents a relationship between
 - 7 individual node records;
 - 8 comparing individual node records and identifying pairs of records having
 - 9 similar data;
 - 10 for each identified pair of individual node records, comparing related
 - 11 individual node records and deciding based on predetermined criteria whether the identified
 - 12 pair of individual node records represent the same person;
 - 13 consolidating the information from a plurality of records determined to
 - 14 represent the same person into a single person record;
 - 15 at the host computing system, receiving a request from a user computer to
 - 16 display a family tree;
 - 17 using the individual link records, the individual node records, and the single
 - 18 person records to create a data representation comprising the requested family tree; and
 - 19 sending the data representation to the user computer.
- 1 2. The method of claim 1, further comprising:
 - 2 using the genealogy data to create surname records, wherein a surname record
 - 3 includes a surname and a number representing the number of times the corresponding
 - 4 surname is encountered in the genealogy data; and
 - 5 using the surname records to partition the individual node records into groups
 - 6 prior to comparing the individual node records.
- 1 3. The method of claim 1, wherein comparing individual node records
- 2 and identifying pairs of records having similar names comprises calculating a score
- 3 representing the likelihood that the identified pair of individual node records represent the
- 4 same person.

1 4. The method of claim 3, wherein comparing related individual node
2 records and deciding based on predetermined criteria whether the identified pair of individual
3 node records represent the same person comprises revising the score based on the
4 comparison.

1 5. The method of claim 3, wherein the individual node records span only
2 a single generation.

1 6. The method of claim 3, wherein the individual node records span
2 multiple generations.

1 7. The method of claim 1, wherein receiving genealogy data from at least
2 one source comprises receiving genealogy data from a source selected from the group
3 consisting of the Ancestry World Tree system, a Social Security Death Index database, the
4 World Family Tree system, a birth certificate database, a death certificate database, a
5 marriage certificate database, an adoption database, a draft registration database, a veterans
6 database, a military database, a property records database, a census database, a voter
7 registration database, a phone database, an address database, a newspaper database, an
8 immigration database, a family history records database, a local history records database, a
9 business registration database, and a motor vehicle database.

1 8. The method of claim 1, wherein receiving genealogy data from at least
2 one source comprises receiving genealogy data as a GEDCOM file.

1 9. The method of claim 1, wherein using the individual link records, the
2 individual node records, and the single person records to create a file comprising the
3 requested family tree comprises including alternatives for relationships for display to a user,
4 the method further comprising:

5 receiving a selection representing a user choice among the alternatives;
6 using the selection to update the family tree; and
7 storing the selection.

1 10. The method of claim 9, further comprising:
2 receiving new information that changes the family tree; and
3 providing the user an opportunity to revise the selection.

1 11. The method of claim 1, further comprising:
2 receiving information from a user, wherein the information comprises a
3 selection from the group consisting of a digital picture, a text file, genealogy data, a user-
4 entered text file, a sound file, a video file, and any computer readable file; and
5 storing the information, whereby the information is available to other users.

1 12. The method of claim 1, further comprising:
2 subsequent to sending the file to the user computer, receiving additional
3 genealogy data that changes the family; and
4 notifying the user of the changes.

1 13. The method of claim 12, wherein notifying the user comprises a
2 selection from the group consisting of: sending the user an email; sending a file to the user
3 upon the user accessing the host computing system, wherein the file comprises alternatives;
4 and displaying a notification to the user upon the user accessing the host computing system.

1 14. The method of claim 1, further comprising:
2 subsequent to sending the file to the user computer, receiving a request from
3 the user computer to send more detailed information relating to the family tree;
4 using the individual link records, the individual node records, and the single
5 person records, to compile the more detailed information; and
6 sending the more detailed information to the user computer.

1 15. A system for creating a family tree, comprising:
2 a host computing system, comprising
3 means for receiving genealogy data from at least one primary source;
4 and
5 means for sending information to a user computer;
6 wherein the host computer system is programmed to:
7 create one or more node records and one or more link records from
8 received genealogy data, wherein individual node records include at least name data and each
9 individual link record includes relationship data that represents a relationship between
10 individual node records;
11 compare individual node records and identify pairs of records having
12 similar data;

13 for each identified pair of individual node records, compare related
14 individual node records and decide based on predetermined criteria whether the identified
15 pair of individual node records represent the same person;
16 consolidate the information from a plurality of records determined to
17 represent the same person into a single person record;
18 respond to a request from a user computer to display a family tree by
19 using the individual link records, the individual node records, and the single person records to
20 create a data representation comprising the requested family tree; and
21 send the data representation to the user computer.

1 16. The system of claim 15, wherein the host computer system is further
2 programmed to:

3 use the genealogy data to create surname records, wherein a surname record
4 includes a surname and a number representing the number of times the corresponding
5 surname is encountered in the genealogy data; and

6 use the surname records to partition the individual node records into groups
7 prior to comparing the individual node records.

1 17. The system of claim 15, wherein the host computer system is further
2 programmed to calculate a score representing the likelihood that the identified pair of
3 individual node records represent the same person.

1 18. The system of claim 15, wherein the individual node records span only
2 a single generation.

1 19. The system of claim 15, wherein the individual node records span
2 multiple generations.

1 20. The system of claim 17, wherein the host computer system is further
2 programmed to revise the score based on the comparison.

1 21. The system of claim 15, wherein the means for receiving genealogy
2 data from at least one source comprises an interface to a source selected from the group
3 consisting of the Ancestry World Tree system, a Social Security Death Index database, the
4 World Family Tree system, a birth certificate database, a death certificate database, a
5 marriage certificate database, an adoption database, a draft registration database, a veterans

6 database, a military database, a property records database, a census database, a voter
7 registration database, a phone database, an address database, a newspaper database, an
8 immigration database, a family history records database, a local history records database, a
9 business registration database, and a motor vehicle database.

1 22. The system of claim 15, wherein the host computer system is further
2 programmed to receive genealogy data as a GEDCOM file.

1 23. The system of claim 15, wherein the host computer system is further
2 programmed to:

3 include alternatives for relationships for display to a user;
4 receive a selection representing a user choice among the alternatives;
5 use the selection to update the family tree; and
6 store the selection.

1 24. The system of claim 23, wherein the host computer system is further
2 programmed to:

3 receive new information that changes the family tree; and
4 provide the user an opportunity to revise the selection.

1 25. The system of claim 15, wherein the host computer system is further
2 programmed to:

3 receive information from a user, wherein the information comprises a
4 selection from the group consisting of a digital picture, a text file, genealogy data, a user-
5 entered text file, a sound file, a video file, and any computer readable file; and
6 store the information, whereby the information is available to other users.

1 26. The system of claim 15, wherein the host computer system is further
2 programmed to:

3 receive additional genealogy data that changes the family; and
4 notify the user of the changes.

1 27. The system of claim 26, wherein the host computer system is further
2 programmed to:

3 send the user an email;

4 send a file to the user upon the user accessing the host computing system,
5 wherein the file comprises alternatives; and
6 display a notification to the user upon the user accessing the host computing
7 system.

1 28. The system of claim 15, wherein the host computer system is further
2 programmed to:

3 receive a request from the user computer to send more detailed information
4 relating to the family tree;
5 use the individual link records, the individual node records, and the single
6 person records, to compile the more detailed information; and
7 send the more detailed information to the user computer.

1 29. A method of creating a family tree, comprising:
2 receiving data at a host computer system that defines a plurality of personas,
3 wherein the data comprises one or more assertions for each persona and wherein each
4 persona represents a person;

5 storing each persona as a persona record;
6 at the host computer system, receiving a request from a user to provide a
7 family tree, wherein the request comprises at least one assertion;
8 identifying an initial persona record;
9 from the initial persona record, performing a relationship analysis to infer any
10 relationships with other persona records using the assertions of the initial persona record and
11 the other persona records;

12 if a relationship is inferred, assigning at least one relationship type to the
13 relationship between the records;

14 using the persona records and the relationship types to construct a family tree;
15 and

16 sending a file comprising at least a portion of the family tree to the user.

1 30. The method of claim 29, further comprising repeating the attempting to
2 infer and assigning steps for the other persona records until no additional relationships are
3 inferred.

1 31. The method of claim 29, wherein the initial persona record is identified
2 using the last name provided by the user.

1 32. The method of claim 29, wherein the relationship analysis is performed
2 prior to receiving the request from the user.

1 33. The method of claim 29, wherein the assertions for a particular persona
2 record originate from a single source.

1 34. The method of claim 33, wherein the single source comprises a
2 selection from the group consisting of a census record, a newspaper article, a user input
3 record, and a government record.

1 35. The method of claim 29, further comprising using the assertions of the
2 initial persona record and the other persona records to assign a score to each relationship,
3 wherein the score represents a likelihood that the relationship correctly reflects a relationship
4 between the persons represented by the personas.

1 36. The method of claim 29, wherein relationship types comprise a
2 selection from the group consisting of same person, parent-child, spouse, sibling,
3 grandparent-grandchild, uncle/aunt-niece/nephew, and cousin.

1 37. The method of claim 29, further comprising using the assertions of the
2 initial persona record and other persona records to assign assertion scores to assertions of
3 persona records, wherein assertion scores represent a likelihood that a particular assertion
4 correctly reflects an analogous assertion of the person represented by the persona.

1 38. The method of claim 29, wherein assertions comprise a selection from
2 the group consisting of name, birth day, death day, birth city, and death city.

1 39. A system for creating a family tree, comprising:
2 a host computer system configured to:
3 receive data that defines a plurality of personas, wherein the data
4 comprises one or more assertions for each persona and wherein each persona represents a
5 person;
6 store each persona as a persona record;

7 perform a relationship analysis to infer relationships among persona
8 records using the assertions of the persona records;
9 if a relationship is inferred, assign at least one relationship type to the
10 relationship between the records;
11 use the persona records and the relationship types to construct a family
12 tree;
13 receive a request from a user to provide a family tree; and
14 send a file comprising at least a portion of the family tree to the user.

1 40. The system of claim 39, wherein the request from the user comprises at
2 least a name.

1 41. The system of claim 39, wherein the host computer system is operable
2 to perform the relationship analysis in response to the request from the user.